U.S. Army Soldier Systems Center
Paperless Contracting Pilots

Introduction:

The Deputy Secretary of Defense, Dr. John Hamre directed that all DoD services and agencies will be paperless contracting capable no later than 1 January 2000. The Paperless Contracting IPT mission is to plan and coordinate implementation of a paperless contracting process that begins with requirements handoff and ends with contract closeout with existing capabilities and infrastructures. The ultimate goal is to provide an infrastructure capacity to eliminate paper transactions entirely within DoD's contracting process. The U.S. Army Soldier Systems Center (SSC) - Natick, Soldier and Biological Chemical Command (SBCCOM), (formerly Soldier Systems Command), was asked to participate for the Army's benefit to prove the concept of paperless contracting.

End-to-End Pilot Approach:

The pilot proved the concept of a paperless contracting organization using current automated contracting systems and available commercial software. The SSC uses both Procurement Desktop-Defense (PD2) and PADDS for contracting systems. The pilot incorporated both systems (the pilot was initiated with SAACONS as one of the systems) to test the paperless concept for weapons systems and spares contracting. The SSC paperless contracting pilot was initiated 1 May 1998.

The paperless contracting pilot was to prove the concept of end-to-end paperless contracting starting with the purchase request handoff, posting it through the procurement system, distribution, and storing all documentation electronically through contract closeout. To track and report on the progress of the pilot, SSC chose the six metrics being used to measure paperless contracting at the DA level. The six metrics include requirements (purchase requests), solicitations, contracts/modifications, receipts, invoices/payments, and contract closeout.

To successfully pilot this concept, the SSC needed its partners from associated Government agencies, such as, DCMC, DFAS, and DCAA, and most importantly we needed our industry partner's participation and commitment. OSD's PM-Paperless Contracting and the Army's PM-Paperless Contracting were instrumental in initially coordinating all of the players to successfully pilot this concept. Initially all services were to begin paperless contracting pilots, however, the Navy and Air Force decided to review and implement lessons learned as appropriate from the Army pilots.

SSC worked with the two leading DCMC paperless offices located in Phoenix and Clearwater, as a pilot requirement. Due to this we were limited to one contract with each DCMC office for the pilot. The contractors were Motorola in Phoenix as the weapon systems pilot and Seco South in Clearwater, FL as the spares pilot. An added benefit was Seco South is a small business, which allowed us to verify the capabilities for small

businesses to participate in DoD's paperless efforts. This pilot has brought the Army closer to developing standard approaches to do business electronically with both large and small trading partners. Additional participants included representatives from HQ DCMC, DCAA-Phoenix, HQ DCAA, ASA(ALT), and sub-contractor for Motorola (USI).

The first step to initiating the pilot was to flow the Contracting Division's business processes to ensure only effective and efficient processes would be piloted. Even ineffective processes can be performed efficiently. The primary reason was to look for opportunities to reengineer our processes before we looked at the paperless concept. Most important throughout the entire effort was to maintain user support for the process changes. Without buy-in from the workforce, users will not readily incorporate new technology changes into their daily processes.

During initial meetings with our industry partners we realized the need for a Trading Partner Agreement (TPA) between all parties. The purpose was to identify Statement of Goals and further establish commitment already demonstrated in this pilot to date. Briefly, the TPA identified issues of security (storage on government end and transmission), communication protocols (email), and process flows and integration thereof.

The spares pilot included a team with DCMC-Clearwater, ASA(ALT), ECRC-Largo, DCAA, and the contractor Seco South in Clearwater, FL. The initial meeting's goal was to partner with team members, bring them into a common operating environment with the government and identify the paperless contracting cycle. As with Motorola, a trading partner agreement was initiated and signed. ECRC-Largo was an instrumental partner providing technical support to Seco South to assist them in acquiring the skills with the latest technology.

Other Initiatives:

Parallel to the paperless pilots being conducted at SSC and Ft. Campbell, other automated initiatives are being conducted. Two such efforts are the Army Single Face to Industry Web Page solutions. HQ Army Materiel Command took the lead on the first effort and successfully deployed a system for simplified acquisitions in a very timely manner. The second is the CECOM Army Business Opportunities Page. This system will provide a standard means for industry to review all Requests for Proposals, as well as, submit proposals electronically to the Army. These systems will provide a standard means for industry to review all RFQs and RFPs. These web sites are not intended to replace existing AMC MSCs sites, but to augment the audience.

DFAS supported by OSD, initiated the development of the Wide Area Workflow (WAWF) web-enabled system for processing all DD250s and invoices through multiple approval channels to DFAS for payment.

Requirements Handoff:

Requirement handoffs include electronic purchase requests, statements of work, performance specifications, CDRLs, technical data packages, and funding documentation.

Procurement Tracking System

SSC had developed an automated purchase request (PR) system, called Procurement Tracking System (PTS), in 1996 and has successfully awarded in excess of $300M in contracts through the system for everything from base operations support through new weapon systems. Beyond the nomenclature of "tracking", PTS is a comprehensive electronic purchase request system. The PTS system, developed in Lotus Notes by a team of Government experts and a local contractor, Synetics. The system provides electronic signature and the capability to generate modifications to existing contracts in addition to the standard PR generation. PTS was mapped directly into SAACONS, which provided significant labor savings for contract specialists from inputting data. All non-PADDS generated contracts purchase requests, with attachments

(SOW, CDRLs, etc.) are created in the system electronically, and routed electronically to all persons involved in the procurement. The Lotus Notes security encryption identification is used to ensure procurement integrity. Once the final approver "checks submit", the procurement was transferred to the SAACONS via automated scripts, and now comes to the Contracting Division for manual input into PD2. PTS has been in production since January 1997 and includes a credit card management functionality that has been adopted by AMC as the standard for their Purchase Card Management System.

The requirements handoff is completed via the PTS system. The system is capable of internet based purchase request functionality, electronic signature routing, and modifications to existing contracts.

SSC is currently researching options for a requirements generation system. Research exists in the other services such as the Navy downselected from 23 to five systems as meeting their needs and should interface with PD2. It is extremely critical for the Paperless Acquisition Process to have a seamless integration of requirement generation though contract award on a single desktop. By using a PR system that is not integrated will create inefficiencies and lack of user support.

Motorola sees the advantages of the paperless concept, as well as the challenges. They are initiating their own internal Totally Integrated Global Electronic Requisitioning System (TIGERS) for non-production buys. This system mimics many of the DoD

purchase request systems with systematic approvals and incorporates electronic catalogs for customers to view to assist in their requests.

SSC with the American Management Systems began implementation of PD2 version 4.1 in October 1998. The AMS implementation, training, and technical survey teams proved to be a valuable asset assisting in the deployment within the SSC environment. However, by incorporating PD2 we have taken a step back in technology with regards to requirements handoff. PTS does not interface with PD2, therefore we are back to printing off the PR from PTS and manually inputting the information into the PD2 contracting system. Until such time as an interface is developed for PTS or we procure Acquiline, AMS' front-end solution.

Solicitations:

Solicitations for this pilot refer to the release of all RFPs, RFQs, IFBs, and EDI 840 transactions. SSC's web page is a database-driven secure site and has the capability to not only release all solicitations electronically, but to receive vendor's bids and proposals electronically. Additionally all contracting forms have been automated in word templates to minimize costs and to ensure they can be transmitted electronically. Our initial cost analysis shows an annual savings of approximately $100k by utilizing our web page versus paper copy distribution.

It is also important to mention here that the AMC Army Single Face to Industry is linked to each MSC's web site, where CECOM's Army Business Opportunities Page (ABOP) is not. Many MSCs have developed there own database-driven secure sites in order to share solicitation data with industry in a paperless environment. We should not be precluded from addressing are individual requirements as we incorporate an Army Single Face to Industry web page. These other efforts should be reviewed to gain the best practices and technology to further the ASFI efforts.

SSC is the first Army site to successfully submit PD2 user defined files (UDF) automatically to ASFI for all simplified acquisition actions. We are also submitting the same RFQs via EDI, which provides two mechanisms for industry to receive and respond electronically. In this manner we are reaching the world with all known means. We have learned that submitted quotes through EDI that certain Value Added Networks (VAN) cannot translate a file that was sent out by the ECPN. There is a clear electronic process in place to identify and notify us when a file does not get out to the public.

SSC had been converting TDPs into a JEDMICS viewer/indexer in order to post on our web page. Unfortunately funding for JEDMICS was cancelled by DoD. The technological capability is available should funding be restored. SSC's Acquisition web page is linked to the stored JEDMICS files to allow vendors to view and download

technical drawings for each solicitation requiring their use. One note is there aren't very many drawings as we have moved to performance specifications.

SSC has developed a no cost automated method for electronic source selection. Capitalizing on the Lotus Notes secure environment used at Natick, we tested this application with one solicitation. This application permits the source selection evaluation board only, to read, write, view, file access, and edit privileges to evaluate a proposal in a completely paperless environment. Vendor proposals are required to be submitted electronically (if a contractor can not submit electronically, the proposal is scanned when received to put it in an electronic format.)

SSC piloted this electronic source selection tool with one RFP to go through the SSEB stage of contracting process, in the electronic Lotus Notes environment. For this first pilot, all members of the board were local and the application is already in process with secure contract folder sharing. Template setups were created for secluded and secure workgroups with read/edit privileges, and legal review. This process was established to measure time and cost savings and a different approach to proposal analysis, permitting flexibility in an SSEB member's schedule. We found the technology exists to perform the process in an electronic environment, however it is not efficient to perform the entire process electronically. Members of the board found it more efficient to print the proposals for their evaluation and then respond electronically to the chairman

with their comments. Technology does not permit viewing multiple documents and pages simultaneously for comparison evaluation.

A major advantage to posting all solicitations on the web is it provides DCMC access to participate in early Contract Administration Services. They are able to review our solicitations and provide input to ensure the contract will be more efficiently administered.

Motorola and SSC agreed during the pilot to test their CipherNET security software between all of the parties. Motorola has been active in a developing a secure electronic environment for transmission of commercial, government, and industrial data. The plan was to test proprietary data transmission through electronic mail systems and web applications. While this parallels the effort of the CECOM ABOP, this approach was conducted to identify alternative solutions to prove or disprove the ease of encrypted transmission of proposals. Inherent in this mission is to test as many existing solutions as possible, since industry may feel more comfortable submitting proposals through encrypted mail versus a web solution. The software being used is similar to commercial products such as MIT's Pretty Good Privacy (PGP), and Netscape functions to encrypt/decrypt data. It is compatible with email systems that incorporate Messaging Application Programming Interface (MAPI).

Security has been a major issue for industry as it relates to transmitting proprietary data through electronic public access systems. Industry buy-in is still a primary concern. SSC tested various methods during the pilot, including data encryption and digital identification and authentication systems via email and web technology. Motorola's CipherNet software was used to exchange encrypted email between DCMC Phoenix, SSC, and Motorola employing authenticated digital signatures. CipherNet uses standard public encryption methods to scramble data, and transmit and receive between two clients. This approach satisfies our industry partner's concerns with a one-to-one proprietary data transmission versus the internet's one-to-many data access. Our small business partner also successfully tested email encryption and digital signatures between two Netscape email applications. The small business uses America On Line as their ISP. The test confirmed that AOL 4.0 has a technical problem with email attachments and required the use of Netscape. AOL will need to distribute a patch to fix this if it has not been accomplished to date. CipherNet proved industry, the PCO and the ACO can successfully exchange data through email using their authenticated digital signatures.

The Natick Contracting Division's web server is configured for 40-bit VeriSign certificate and we have the technical capability to receive vendor proposals. We were considering incorporating Motorola's new version of CipherNet, due to its capability to receive 40-bit to 128-bit encrypted messages. This configuration would meet the

requirements of the Department of Commerce restricting the use of 40-bit outside the U.S., but would permit U.S. companies to utilized the highest encryption available. However, this option remains blocked until the National Security Agency determines the standard process for PKI. CipherNet is a closed system, which may not meet the standardized process envisioned by NSA.

Once the security issues are resolved, our industry partners see the capability and willingness to submit proposals in picture document format. This is so the buying activities can not change the submission. They also made a recommendation to standardize using commercial software, such as Pro-pricing, which is web-enabled, should an agency want an additional copy to give them the capability to do an analysis with a proposal submission.

ECRC worked with Seco South on how to utilize email encryption functions using standard web browsers such as Netscape. There is as much concern with transmission security as there is with data storage on the government side. Focus needs to remain on efforts for both secure transmission of data and on the storage of the data.

Currently, most small businesses such as Seco South do not utilize the web for potential business opportunities. According to a January 1999 issue of USA Today, less than 36% of small businesses utilize or have access to the internet. Their process has traditionally been to reference the paper CBD notices. One of our measures for the pilot

success was to get Seco South utilizing the web for solicitations as well as other contract information. ECRC and small businesses are proponents of the DoD and Army Single Face to Industry web pages, because it reduces the research time to locate a potential opportunity.

Contracts/Modifications:

The metric for contracts and modifications include SF33/26, SF1449/DD1155, and EDI 850/860 truncations.

At the on-set of the pilot, there did not exist an automatic feed from SAACONS to the EDA server. Due to software problems, the interface was not completed until January 1999, after implementation of PD2, but has been successfully tested. The Force XXI contract was awarded in SAACONS, and since the automatic feed to EDA from SAACONS was not available at the time, we simulated the process through pdf conversion of the entire contract and 65 modifications, mapping the relational file (csv) that links the pdf files and ftp to the EDA server.

All new modifications were subsequently scanned until we implemented PD2 and received the scripts for SAACONs to transmit to EDA. PADDS contracts and modifications had the capability to transmit to the EDA server prior to the pilot beginning.

The SSC incorporated a funding modification to the Force XXI contract to test pilot with DCMC-Phoenix. The modification required the electronic submission of a contractor proposal. The modification had to be faxed to and from the contractor for signature before being scanned into a pdf file for transmission to the EDA server. The pdf file could then be attached to an email to be sent to the contractor. The capability to electronically conduct bilateral signatures on contracts and modifications is one of the major impediments to a totally paperless contracting process. Another issue is PADDS does not incorporate an electronic signature capability at this time.

All correspondence related to the Force XXI contract and all attachments that were not of a proprietary or sensitive nature have transpired electronically between Motorola, SSC, DCMC-Phoenix, and DCAA. To further facilitate a totally paperless process, SSC scanned all personal signatures in the Contracting Division into tif files in order to sign all documentation electronically.

DCMC-Clearwater tested an administrative modification through the electronic process to ensure that SSC was able to retrieve efficiently.

The EDA server is available to all Government agencies with password access. OSD is currently working to give controlled access to our industry partners, which will permit transferring all basic contractual documents electronically to them. EDA does not currently have the capability to receive attachments to a contract, which prevents it from

being the total solution. It is a DFAS system intended to provide payment and CLIN information to DFAS to simplify and expedite the payment process.

DISA turned the decision for DoD PKI administration over to NSA to determine the approach for issuing certificates. This impacts the process for contractors to gain access to WAWF and EDA web site. An issue still remains as to the protocol for contractors to view their own contracts from the EDA web site. The process of Motorola completing the standard FORM 41, submitting it to DFAS, and PKI certificate issuance took several months for the contractor to gain access to the EDA site. DFAS configured the extranet for Motorola to gain entry and view only their contract information. This process needs to be reengineered if industry is to participate.

Instrumental to the spares pilot success was DCMC-Clearwater teaming with the Electronic Commerce Resource Center (ECRC) – Largo and the small business Seco South. ECRC assisted Seco South technologically to ensure they would be able to participate in the electronic commerce loop between DCMC, DFAS, and SSC as we tested the transmission of documents. We piloted delivery orders and modifications through PADDS and MOCAS to verify the processes.

DCMC is incorporating an electronic storage and distribution system for all contracts delegated to them called Electronic Data Management (EDM). It is currently in production at DCMC Phoenix and will be fielded to all DCMC sites in the near future.

This system uses COTS software, Documetrix, that provides a workflow management toolbox to manage, store, retrieve, and transmit data/documents that pertain to contract administration. A scanning procedure for incoming data is also built into Documetrix for paperwork still received from external sources. This system is designed to streamline the workflow process of contract administration, electronically folderize all contract information, and eliminate as much of the paper trail as possible. DCMC searches the EDA server by CAGE code and downloads the contractual information directly into their Documetrix system.

SSC and DFAS-St. Louis successfully worked together to prove the electronic transmission of purchase orders and related documents. The SF 1449s from SAACONS were scanned into a portable document format (.pdf) and emailed to all persons on the distribution list (internal and external to SSC). Although printed once out of SAACONS for scanning, the conversion to pdf saved time and costs in distribution. With the implementation of PD2, the scanning of contract data is no longer required and all basic contract data is forwarded to the EDA server for DFAS and DCMC to view.

Receipts:

The metrics for receipts included electronic DD250s and EDI 856(S)/861(D) transactions.

The Wide Area Workflow (WAWF) demonstrated web access and transmission to a database of the DD250 Material and Inspection form. This proves the concept of having a standard focal origin point for creation, submitting, and retrieval of DD250 data. Another key point is that with a central origin of the DD250, misrepresentation of data will be reduced, and common access to the same information will be increased. HQ DCMC and DCMC-Phoenix is coordinating a significant pilot effort with their industry partners on WAWF. SSC is participating as a destination acceptance site for the process with both our large and small trading partners.

Training included instructions to install and use WAWF and security PKI certificates. Initial tests resulted in some functional issues yet to be covered through this process, such as, how does an acceptance official know that inspection has occurred if it is other than the inspecting official and how does a signature authority know that shipping has occurred if other than DCMC?   Next, how do all electronic form recipients know DFAS has received the SF1034? While a passive online contractor invoicing system (COINS) exists for Government and contractors to determine the status of an invoice/payment, recommend a "push" verification routine to all persons per form in WAWF. Three, currently the SF1034 process notifies only the contractor of rejection. If the contracting office or DCMC has electronically signed the invoice/payment, this

person should be notified as well electronically. One other issue is that of the PKI certificates process created unnecessary delays.

The small business, Seco South is a confirmed vendor to submit DD250s into the DFAS web invoicing system (WinS). This pilot has proven ECRCs can reach out to help small business participate quickly in the electronic commerce world, regardless of small businesses limited resources. Seco South has also piloted the WAWF successfully sending DD250s to SSC for acceptance.

Each DFAS office maintains different policies on whether they accept electronic signatures and documents which most do not. DFARS 232.905 -- Invoice Payments, states, DoD Manual 4000.25-5-M, Military Standard Contract Administration Procedures (MILSCAP), authorizes electronic signature of receiving reports. The DFAS offices we work with will not accept electronic signatures even with the change to the DFARS. Currently DFAS' policy hampers DoD's paperless initiative, is inefficient and causes significant delays in payments for every MSC resulting in excessive interest penalties being paid. WAWF will hopefully solve this issue, since it is a DFAS system, if deployed on schedule.

Invoices/Payments:

Metrics included electronic DD250s, commercial invoices, EDI 810, and EFT transactions.

DCMC-Phoenix has the charge to train and assist Motorola in submitting their SF1034 payment vouchers through WAWF. This testing will occur in conjunction with the normal methods of direct payment procedures to DFAS. Motorola submits all invoices electronically using either a CD-ROM or WinS (Web Invoicing System).

ECRC assisted Seco South to register and train them on how to transmit invoices electronically. They utilized the DFAS' WinS to complete this process. In production the DFAS Web Invoicing System permits contractors to submit invoices through the web, and then converts to the standard EDI convention (810). Coined the ECweb application, this application processes invoices, payments, and vouchers with the Mechanization of Contract Administration Services (MOCAS) system contracts. The only requirement to use WinS is that contractor must use Netscape 3.0 or higher to enter data, this is another issue that pushed Seco South to obtain a different ISP, and there are several restrictions to using WinS, such as a vendor must have direct submission authority to DFAS. Additional information on WinS can be obtained at: http://ecweb.dfas.mil. Seco South also piloted the WAWF process for DFAS.

Both industry participants for this pilot and testing WAWF expressed their preference for continuing to use the DFAS WinS system for submitting invoices, when

compared with the WAWF system. Ease of use was the primary factor. They understand that WAWF is much more comprehensive in functionality, but testing has yet to verify ease of use. Future versions and instructions for WAWF should focus on simplifying the process.

In Phoenix, HQ DCMC personnel are present during the WAWF tests and have to date the system looks very promising. HQ DCMC and DFAS indicate they are still on schedule for the June test completion of WAWF. The web enable process is proving to be a powerful tool to manage the receipt, invoice and payment process. It should be looked into as a possible solution to manage the bilateral signature requirement for contracts and modifications.

Motorola currently submits all invoices electronically to DCAA via CD-ROM. DCAA receives only the first and final voucher of a cost reimbursable contract. The Phoenix DCAA office maintains these vouchers in paper format. DCAA does not store individual vouchers on CD-ROM. However, DCAA does store the contractor's annual submissions of incurred costs data on CD-ROM. As part of Motorola's Annual Incurred Cost Claim, Motorola provides DCAA with a CD-ROM containing the supporting data recorded in its accounting records.

Contract Closeout:

Metric included electronic versions of DD1597/1594 (checklists), PK9 final payment, and final vouchers.

SSC created electronic word templates of all contracting forms, including the DD1597, Contract Closeout Checklist, and DD882, Report of Inventions and Patents. This permits an easy process to attach to emails and to fill in and file electronically, since a word document can be imported into a PD2 contract folder. The issue still remains as to how to create an electronic contract folder for PADDS contracts.

The Joint Continuous Acquisition and Logistics System (JCALS) has been proposed as a possible workflow manager to facilitate the electronic contract folderization process in AMC. PD2 integration has been put forward to the material management community as a recommended process to integrate with JCALS and pilot when we go into production with JCALS. The JCALS infrastructure is expected to be capable of transferring SPS documents intra/inter site level at a low cost and in a secure manner. Access to substantial imagery files (TDPs and TMs) will be easier via JCALS. A tool still needs to be developed to accommodate all trading partners, similar to DCMC's proposed Shared Data Warehouse (SDW) or possibly to enhance the capabilities of the EDA server.

The total paperless closeout process is still an outstanding issue. DCMC-Phoenix, Motorola, and Soldier Systems Center have agreed to flow this process and develop a

paperless method for the existing contract when it is complete in August 1999. This goes beyond the timeframe of the pilots, but is considered a necessary reality for all parties to address. A significant issue will be the successful testing of WAWF to assist in the closeout process.

SSC has developed a policy to maximize the SPS product for contract closeouts. Combined with the DFAS payment voucher and the "electronic contract folder," the Contracting Officer or Contract Specialist will route the electronic contract folder to a user "closeout" cabinet. A system administrator will maintain and organize closed contracts according to the FAR for long-term archiving.

DCAA reported they instituted an intranet tool in January 1999 in order to facilitate the exchange of information between customers and contractors.

Lessons Learned:

The outcome of this pilot was a measure of how existing automated technology can be implemented to satisfy the six paperless contracting metrics to achieve the mandated totally paperless contracting process. Inclusive in the outcome is business process re-engineering as well as identification of where technology cannot support DoD's needs to have standard business processes to implement a standard system such as

PD2. These holes require additional funding to close with new technologies, such as the bilateral signature capability.

First and foremost, process re-engineering must always be parallel and in conjunction with technological testing or improvements. Without the human resource moving forward, mission success will not be met.

Security levels need to be set at the appropriate level based on the true nature of the information being transmitted and stored. The expense of higher levels of security assurance may not be the best answer when dealing with small businesses with limited resources, transmitting only pricing data, and no classified data. Requiring expensive PKI certificates will diminish our supply base, since contractors with elect not to participate.

The process to obtain the necessary information through access to web sites via PKI certificates must to be streamlined to make it easier for the end-user such as Motorola or a government agency. Geographical location should not affect the process, but as we have found, communication strictly through email and telephone does not always provide, enforce, or clarify what needs to be done. DoD initiatives exist to research and identify methods to create and maintain a secure data exchange environment among Government entities, as well as, between government and contractor partners.

The small business paperless pilot with DCMC Clearwater, ECRC Largo, and Seco South Contracting revealed issues pertaining to security certificates, due to this pilot effort. The contractor switched their internet service provider (ISP), AOL, to Netscape in order to participate electronically. The AOL environment is not currently conducive with email attachments, email encryption, and digital certificates. The Government will require small business additional investments for the long-term to conduct business with us while ensuring a secured paperless flow.

All Acquisition Centers, PMs, IMMCs, Resource Management, etc, need to be informed they have access to the EDA server to view and retrieve contract information electronically from DCMC and contracting offices. This will provide a significant savings to the Government in just distribution costs alone.

As PD2 is being implemented DoD-wide, resources need to be identified to provide a electronic requirements generation tool that interfaces with the system. Currently the contractor AMS has developed a front-end system called Acquiline, which interfaces directly with PD2. There are additional costs involved incorporating Acquiline, such as developing interfaces to a financial management systems that must be realized.

During the process of testing with the DFAS ECweb application, Seco South contracting raised some concerns over Government distributed documents. Specifically,

if they submit invoices/DD250s electronically, are they still required to fax/email copies to remaining distribution contacts?

Also the Government continues to send procedures, documents, requirements, etc. for contractors to complete. This can be extrapolated to any of the metrics in addition to invoicing and payment. While electronic contracting procedures are being piloted, parallel efforts to identify and re-engineer manuals, requirements, and procedures should also be conducted by all agencies.

JCALS is being implemented for technical manual user at several AMC sites in 1999. In addition to this user base, our current infrastructure may permit the installation of JCALS licenses to the Acquisition Center. This will allow the contracting communities to test the possible application of an electronic contract folderization (ECF) function using JCALS. This will further facilitate transferring contractual information to our customers.

PD2 is suppose to provide functionality for a secure SSEB environment, but only for the select group having the complete software package. This raises the issue of identifying a method to conduct contract evaluations, across platforms and site operating systems? JCALS may be able to solve this workflow issue, if security is built in and it will be deployed across DoD services, since many SSEBs at SSC require cross-service participation. Out Lotus Notes application is restricted to internal evaluators.

On the topic of bilateral signatures, ECRC-Largo is researching the issue of multiple party digital signatures per single document. Simply stated, are there any commercial techniques that permit multiple users to "securely sign" the same document through email encryption. ECRC indicated that they worked briefly with Concurrent Technologies Corp (CTC) and could not identify a method. ECRC also posed the question to VeriSign (commercial leader in electronic security techniques) and they did not have an answer.

While one may have difficulty measuring quantitatively the success of these pilots, at the very least, the vortex is wide open now and the visibility of this project has opened some eyes, ears, and has stirred action. The Army is leading the way in meeting the Paperless Contracting and Acquisition mandates and has fostered competition among DoD agencies and thus is pushing the process faster for all of DoD.

Industry is expressing complementary interest in a DoD standard procurement system and the concept of maintaining a comprehensive windows-based contracting system. Paperless Contracting as a whole is a concept that industry is currently researching and performing business process re-engineering.

Now that SSC has been in production with PD2 version 4.1 for several months, we witness the need for a Shared Data Warehouse (SDW) capability. A long-term

solution such as an SDW is vital to integrate the systems gap in DoD. We see the SDW process as the most effective way to share active contract administration.

We require logistics and PMs buy-in up front with these efforts to ensure supply systems are interfaced properly. We have observed at the command level, the functional and technical workforce is grasping that "paperless" cannot be performed in a vacuum. Every agency is performing their own paperless initiatives, however, no one at the DoD level is looking at total systems integration. Our new PD2 does not integrate with anything, and DFAS' payment systems do not integrate with our systems. Recommend a technical lead at the DoD level to review and implement policy for business process re-engineering and systems integration.

One last note, as we look to the implementation of PD2 throughout DoD, do not view the software at the Standard Procurement System. Our SPS should be viewed as the "total end-to-end paperless process." We cannot successfully field a standard contracting system without having in place standard processes.